Editorial 5

In many developed countries students encounter curricular differentiation and are sorted into groups, classes and schools as they progress through the educational system. This sorting, commonly referred to as 'tracking' (or sometimes also referred to as 'ability-grouping' or 'streaming'), is widely based on some kind of indicators of students' intellectual ability (be it some measure of student ability – e.g. IQ tests, subject-matter tests – or its estimation – e.g. evaluation by teachers). Tracking has been the centre of educational debates for many years, mainly the impact of tracking on students' achievement and on educational inequalities. Although the 'tracking discourse' is international, we have to bear in mind that the forms of tracking differ from nation to nation and its characteristics do evolve over time.

Comparative analyses of tracking mechanisms between nations are scarce (even though its importance is highlighted – e.g. Kerckhoff, 2001 – one of three important characteristics for comparing educational systems is stratification, referring to tracking), but among the few, LeTendre, Hofer & Schimizu (2003) compare tracking practices in the United States, Germany and Japan and have identified five distinct types of tracking. While Germany applied the curricular differentiation by school type (Type 1 in their typology) in lower-secondary as well as upper-secondary education, Japan sorted students into various types of schools only at the high school level, and in the US, differentiation into different types of schools was not used neither in lower- nor in upper-secondary education. The most common ways of differentiating students in the US, as well as in many other nations with comprehensive school systems, takes place within individual schools.

Recently following the LeTendre typology simplified in three main categories – between-school tracking, within-school tracking and course-by-course streaming – Chmielewski, Dumont, & Trautwein (2013) using PISA data and comparing education systems around the world showed that different types of school tracking might have different effects on student outcomes. In their study they documented different effects of tracking types on students' mathematics self-concept. The available evidence to date on the effects of tracking on overall student achievement seems to be ambiguous. One of the reasons could also be that the effects differ by type of tracking and its concrete implementation. Therefore, it is important to study both elements: the effects of tracking at the national level, as well as the development of the educational structures and mechanisms of tracking. The topical papers of this

6 special issue thus provide two single country studies explaining the mechanisms of tracking in Germany and Australia and one paper that documents inequality related to tracking in the Czech Republic.

The first study, by *Michael Becker*, *Marko Neumann* and *Hanna Dumont*, analyses the recent development of tracking practices in Germany. They argue that Germany is typically perceived as a prototypical example of between-school tracking, as also referred to in the paper of LeTendre and his colleagues. However, due to the criticism of tracking and implementation of de-tracking reforms, the school structure is much more diverse now and all three forms of tracking analysed by Chmielewski et al. (2013) are simultaneously present in Germany. Even though the paper is a single country study seen from an international point of view, it is a truly comparative work as authors analyse the differences between 16 German states and provide a typology of these states with respect to school structures. Also, the results of numerous German studies, including longitudinal studies, assessing the effects of different types of tracking, are presented in this paper and the need for further data and analyses is well perceived by the authors.

In the second paper, *Laura B. Perry* and *Stephen Lamb* analyse the curricular differentiation in Australia using the original typology of five types of tracking proposed by LeTendre et al. (2003). Beyond this analytical approach, they refer to research from the Australian context, which highlighted that even in course-by-course tracking inequality is highly present and students from low SES background are less likely to study the most advanced subject offerings. Their text highlights an important message: even in typical course-by-course streaming, there may be systemic, but less visible and clear differences between schools. High SES schools provide typically more advanced courses and in this way the choice of school in line with differentiated curricula provided even on a course-by-course basis may result in more systemic inequalities between schools and in limited access to advanced curricula for some low SES students.

The last paper in the topical part of this issue written by *Tomáš Katrňák* and *Natalie Simonová* analyses the trends in educational fluidity after the fall of socialism in the Czech Republic. It is well recognized that the structure of upper-secondary schooling in the Czech Republic is traditionally highly diversified (under socialism as well as nowadays) and between-school tracking is widely used, offering different credentials and certificates which has an effect on the social status of individuals compared to their parents. Even though the structure of upper-secondary schooling has basically remained the same, the higher tracks providing the upper-secondary leaving certificate (maturita) have had higher student intakes since 1989 and also access to university was guaranteed to more students. However, the view that the socialist education system provided greater equal opportunities is tested by the authors and the answer is provided based on the analyses of several datasets. Their findings also highlight the importance of inequalities, showing that the vast majority of children of parents from the lowest social classes are the ones achieving the same low education as their parents. Even though the authors do not document particular

effects of tracks on inequalities, qualitative research in the Czech Republic has highlighted the issues linked to the reproduction of inequalities and the role of tracking in upper-secondary schools.

The final part of the topical issue is represented by an interview with Professor *Adam Gamoran* about tracking and its effects. Summarising the research findings and discussing the de-tracking reform in the USA and many examples of research effects of various forms of tracking, it echoes well with the first two topical papers of this issue and we highly recommend that readers read this interview.

Beyond the topical section, this issue also includes a paper written by *Anna Janovská*, *Olga Orosová*, *Jozef Janovský* about head teacher's social support, personality variables and subjective well-being of Slovak primary teachers as well as a conference report from the XVI World Congress of Comparative Education Societies in Beijing.

David Greger

## References

- Chmielewski, A. K., Dumont, H. Trautwein, U. (2013). Tracking effects depend on tracking type: An international comparison of students' mathematics self-concept. *American Educatioal Research Journal*, 50, 925–957.
- Kerckhoff, A. C. (2001). Education and social stratification processes in comparative perspective. *Sociology of Education Extra Issue*, 74, 3–18.
- LeTendre, G. K., Hofer, B. K., & Shimizu, H. (2003). What is tracking? Cultural expectations in the United States, Germany and Japan. *American Educational Research Journal*, 40(1), 43–89.